Information - Obesity and medical certification

Obesity is defined as a body mass index (BMI) in excess of 30 by the 'Nederlands Huisartsen Genootschap' (NHG). The NHG guidelines regarding BMI can be found in the NHG-Standaard Obesitas. The BMI is calculated by dividing the person's mass in kilograms by the square of his height in metres. A BMI calculator can be found here. Obesity substantially increases the risk of acute and chronic medical conditions summarised below:

Definition of obesity

Classification	BMI (kg/m^2)
Healthy weight	18.5 – 24.9
Overweight	25.0 – 29.9
Obesity I	30.0 – 34.9
Obesity II	35.0 – 39.9
Obesity III	40 or more

Risks of health problems associated with obesity

Greatly increased risk	Moderately increased risk	Slightly increased risk
Type 2 diabetes	Coronary heart disease	Some cancers
Insulin resistance	Hypertension	Reproductive hormone abnormality
Gallbladder disease	Stroke	Impaired fertility
Dyslipidaemia	Osteoarthritis	Polycystic ovary disease
Breathlessness	Hyperuricaemia (gout)	Low back pain
Sleep apnoea	Psychological factors	Anaesthetic risk

Treatment that affects medical certification

Medication which reduces the absorption of dietary fat, when combined with a change in lifestyle, can be used to treat obesity in individuals with a BMI in excess of 30 or 28 if other risk factors such as hypertension, diabetes or high cholesterol are present. Although sometimes available over-the-counter all treatments should be discussed with your GP or AME. If you do commence treatment you must notify your AME and ground yourself for two weeks to ensure you have no adverse effects from the medication. Side-effects might include flatulence, oily or leaky stools, abdominal pain and bloating, headaches and anxiety. Appetite suppressants are disqualifying for medical certification and are not recommended for the treatment of obesity.

Surgery

Bariatric surgery promotes weight loss by altering the anatomy of the digestive system and limiting the amount of food that can be eaten and digested, for example by a gastric bypass or gastric banding. It is a major procedure that is usually considered as an option if individual's BMI is 40 or more, or between 35 and 40 if other risk factors that could be improved by a reduction in weight are present. Other criteria also need to be fulfilled and this option should be discussed with your AME. If it is deemed acceptable for treatment for you and you decide to proceed, you must notify your AME as you will be assessed as unfit for a period of up to 3 months post-surgery which will be dependent upon the type of procedure performed and your recovery. Endoscopic procedures will significantly reduce this period. Detailed reports will be required to confirm that you have made a full recovery from the procedure, are not experiencing any incapacitating side-effects, and a final assessment with your AME will be required before you can be assessed as 'fit' again. Any other treatment or procedure that you might be considering must be discussed with your AME. See also Certification following surgical procedures of the digestive tract.

Aeromedical considerations

Beside the potential impact to your health, the nature of your operating environment in relation to your BMI should also be considered.

A Medical Flight Test may be required to ensure that you can safely complete your checks, and have full and free movement to reach all switches and controls without any impedance. You will also need to demonstrate that you can sagely and quickly prepare and evacuate the aircraft in case of an emergency. Separate tests may be required if you fly substantially different types of aircraft e.g. a commercial pilot who also undertakes private flying.

Pilots or light aircraft are reminded that crew (and passenger) weights are important factors for aircraft performance and centre of gravity, and that accurate weights should be measured before flight.

Regulatory requirements

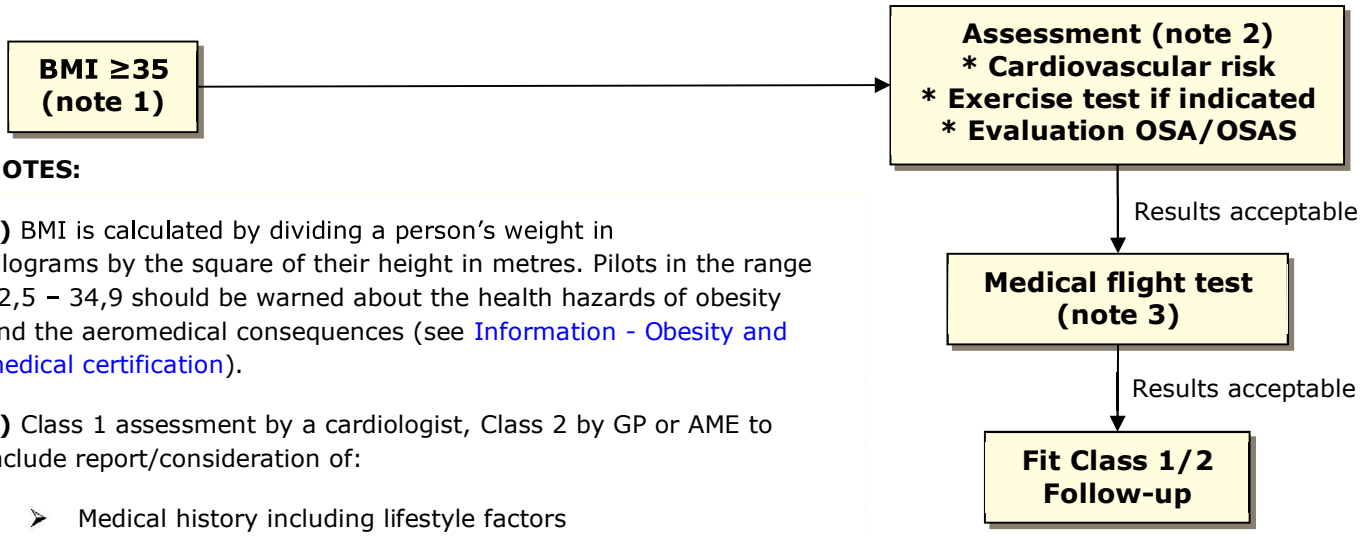
Initial applicants for a medical certificate issue will be referred for further assessment if their BMI is 35 or above. Existing pilots whose BMI exceeds 35 require investigation within 2 months.

- Assessment
  - Medical history & risk factors to include, BMI, waist & neck circumference, lipid profile, blood glucose, urinalysis, blood pressure, Epworth score
  - Class 1: Review by cardiologist to include annual exercise test
  - Class 2/LAPL: AME or GP to investigate include cardiovascular risk score. If risk above 20% in 10 years an exercise ECG is likely to be indicated.

- Medical Flight Test
  - For Class 1 by TRE, Training Captain, or FI(E)
  - For Class 2 or LAPL by CFI or FI(E)

If acceptable, further reviews with either your AME or GP will be required 6 monthly until the BMI falls below 35. Class 1 pilots will require an annual cardiological review to include exercise test. If the BMI increased by 2,5 points since the last medical flight test, the test shall be repeated.

Flowchart – Obesity certification



NOTES:

1) BMI is calculated by dividing a person's weight in kilograms by the square of their height in metres. Pilots in the range 32,5 – 34,9 should be warned about the health hazards of obesity and the aeromedical consequences (see Information - Obesity and medical certification).

2) Class 1 assessment by a cardiologist, Class 2 by GP or AME to include report/consideration of:

- Medical history including lifestyle factors
- BMI
- Waist and neck circumference
- Lipid profile
- Blood sugar
- Urinalysis
- Blood pressure
- Risk of sleep apnoea (see Flowchart Obstructive sleep apnoea (OSA)/OSA syndrome certification)

Cardiovascular risk score should be calculated using appropriate tools, and an annual exercise test performed if risk exceeds 20% in next 10 years.

Pilot must notify AME or referral for investigation and/or treatment.

3) Medical Flight Test Form can be found in the Appendix of this document.
Class 1 with a training Captain or FI(E)
Class 2 with a CFI or FI(E)

4) Follow-up review as above: 6 monthly Class 1, annual Class 2**.** If BMI increases by ≥2,5 then the Medical Flight test must be repeated.